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2123

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Paul Turner, John P. Guiver, Brian Lines and S. Steven Treiber

Application No.: 09/892,586 Group: 2123

Filed: June 27, 2001 Examiner: Ayal I. Sharon

Confirmation No.: 2279

For: COMPUTER METHOD AND APPARATUS FOR CONSTRAINING A
NON-LINEAR APPROXIMATOR OF AN EMPIRICAL PROCESS

CERTIFICATE OF MAILING OR TRANSMISSION	
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as First Class Mail in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, or is being facsimile transmitted to the United States Patent and Trademark Office on:	
7-19-07	<i>Jane Morgan</i>
Date	Signature
JANE MORGAN	
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SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

07/23/2007 HDEMESS2 00000125 09892586

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180.00 0P

Sir:

This Supplemental Information Disclosure Statement is submitted:

- ☐ under 37 CFR 1.97(b), or
(Within any one of the following time periods: three months of filing national application (other than a CPA) or date of entry of the national stage in an international application; or before the mailing date of a first office action on the merits in a non-provisional application, including a CPA, or a Request for Continued Examination).
- ☒ under 37 CFR 1.97(c) together with either:
☐ a Statement under 37 CFR 1.97(e), as checked below, or
☒ a \$180.00 fee under 37 CFR 1.17(p), or
(After the 37 CFR 1.97(b) time period, but before final action or notice of allowance, whichever occurs first)
- ☐ under 37 CFR 1.97(d) together with:
☐ a Statement under 37 CFR 1.97(e), as checked below, and
☐ a \$180.00 fee under 37 CFR 1.17(p), or
(Filed after final action or notice of allowance, whichever occurs first, but on or before payment of the issue fee)
- ☐ under 37 CFR 1.97(i):
Applicant requests that the IDS and cited reference(s) be placed in the application file.
(Filed after payment of issue fee)

Statement Under 37 CFR 1.97(e)

- ☐ Each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement; or
- ☐ No item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned, after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of this Information Disclosure Statement.

Statement Under 37 CFR 1.704(d) (Patent Term Adjustment)

Applies to original applications (other than design) filed on or after May 29, 2000

- ☐ Each item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart application and this communication was not received by any individual designated in § 1.56(c) more than thirty days prior to the filing of the Information Disclosure Statement.
- ☒ Enclosed herewith is form PTO-1449:
 - ☒ Copies of the cited references, AT2-AZ2 and AR3-AX3, are enclosed.
 - ☒ Copies of issued U.S. patents and published U.S. applications are not required and are not being provided.
 - ☐ Copies of the cited references are enclosed except those entered in prior application, U.S. Application No. [], to which priority under 35 U.S.C. 120 is claimed. [OPTIONAL [The earlier application contains copies of the cited references.]
 - ☐ The listed references were cited in the enclosed International Search Report in a counterpart foreign application.
 - ☐ The "concise explanation" requirement (non-English references) for reference(s) [] under 37 CFR 1.98(a)(3) is satisfied by:
 - ☐ the explanation provided on the attached sheet.
 - ☐ the explanation provided in the Specification.
 - ☐ submission of the enclosed International Search Report.
 - ☐ submission of the enclosed English-language version of a foreign Search Report and/or foreign Office Action.
 - ☐ the enclosed English language abstract.

- ☐ Applicant requests that the following non-published pending applications be considered:
(Affix a label or apply the stamp "Non-Published IDS Reference - Do Not Scan" to the front of each unpublished pending appl'n.)

Examiner's
Initials

____ U.S. Patent Application No. [], by [inventor(s)], filed [], Docket No.: []
____ U.S. Patent Application No. [], by [inventor(s)], filed [], Docket No.: []
____ U.S. Patent Application No. [], by [inventor(s)], filed [], Docket No.: []

Examiner

Date

- ☐ A copy of each above-cited application, including the current claims, is enclosed, except any application filed on or after June 30, 2003, which has been scanned into the PTO's Image File Wrapper (IFW) system and is available to the examiner.
- ☐ A copy of each above-cited application, including the current claims, is enclosed, except those entered in prior application, U.S. Application No. [], to which priority under 35 U.S.C. 120 is claimed.

The Examiner is requested to return a copy of the above list of pending applications indicating which references were considered with the next office communication.

It is requested that the information disclosed herein be made of record in this application.

Method of payment:

- ☒ A check for the fee noted above is enclosed, or the fee has been included in the check with the accompanying Reply. A copy of this Statement is enclosed.
- ☐ Please charge Deposit Account 08-0380 in the amount of \$[]. A copy of this Statement is enclosed.
- ☒ Please charge any deficiency in fees and credit any overpayment to Deposit Account 08-0380.

Respectfully submitted,

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(Use several sheets if necessary)

GROUP
2123

EXAM	
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REF.
NO.

DOCUMENT NUMBER
Number-Kind Code (if known)

ISSUE DATE /
PUBLICATION DATE
MM-DD-YYYY

NAME OF PATENTEE OR APPLICANT
OF CITED DOCUMENT

AD2

5,847,952

12-08-1998

Samad

AE2

5,377,307

12-27-1994

Hoskins, et al.

AF2

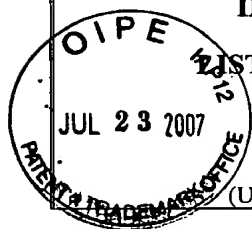
6,822,992 B1

04-19-2005

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DATE CONSIDERED

PTO-1449 REPRODUCED		ATTORNEY DOCKET NO. 1086.2002-001		APPLICATION NO. 09/892,586	
SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT IN AN APPLICATION LISTING OF REFERENCES July 11, 2007 (Use several sheets if necessary)		FIRST NAMED INVENTOR Paul Turner		FILING DATE June 27, 2001	
		EXAMINER Ayal I. Sharon		CONFIRMATION NO. 2279	
				GROUP 2123	



OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)		
AT2	Thompson, M. and Kramer, M., "Modeling Chemical Processes Using Prior Knowledge and Neural Networks," <i>AIChE Journal</i> , vol. 40, p. 1328 (1994).	
AU2	Henson, M. and Seborg, D., <i>Nonlinear Process Control</i> , Prentice Hall (1997).	
AV2	Piche, S., <i>et al.</i> , "Nonlinear Model Predictive Control Using Neural Networks," <i>IEEE Control Systems Magazine</i> , vol. 20, pp.53-62 (2000).	
AW2	Hornick, K., <i>et al.</i> , "Multilayer Feedforward Networks are Universal Approximators," <i>Neural Networks</i> , vol. 2, pp. 359-366 (1989).	
AX2	Duch, W. and Jankowski, N., "Survey of Neural Transfer Functions," <i>Neural Computing Surveys</i> , vol. 2, pp. 163-212 (1999)	
AY2	Moore, R., "Interval Analysis," Prentice-Hill, Inc., 1966.	
AZ2	Cubillos, <i>et al.</i> , "Model Predictive Control Based on a Hybrid Neural Model," <i>Brazilian Journal of Chemical Engineering</i> 12(4):208-217 (1995).	
AR3	Gupta, <i>et al.</i> , "Hybrid First-Principles/Neural Networks Model for Column Flotation," <i>AIChE Journal</i> , 45(3) (1999).	
AS3	Duch, <i>et al.</i> , "Transfer Functions: Hidden Possibilities for Better Neural Networks," Department of Computer Methods, Nicholas Copernicus University.	
AT3	Psichogios, <i>et al.</i> , "A Hybrid Neural Network-First Principles Approach to Process Modeling," <i>AIChE Journal</i> 38(10), (1992).	
AU3	Information Disclosure Statement dated 1-3-2005 from U.S. Patent Application No. 10/842,157.	
AV3	Office Action dated January 12, 2007 from U.S. Patent Application 10/842,157.	
AW3	Reply to Office Action dated January 12, 2007, filed April 9, 2007 for U.S. Patent Application 10/842,157.	
AX3	Office Action Made Final dated July 16, 2006 for U.S. Patent Application 10/842,157.	

EXAMINER	DATE CONSIDERED
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